600-1-257CIP (Sheet 1 of 12)

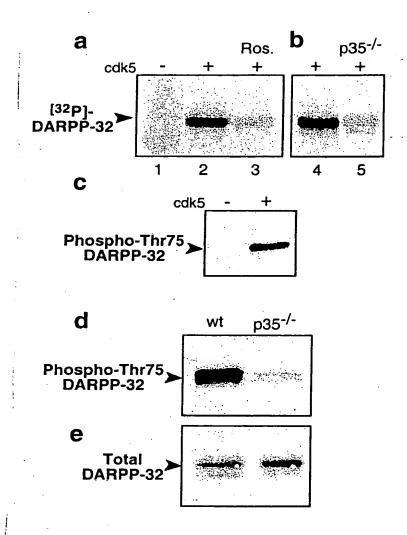


Figure 1

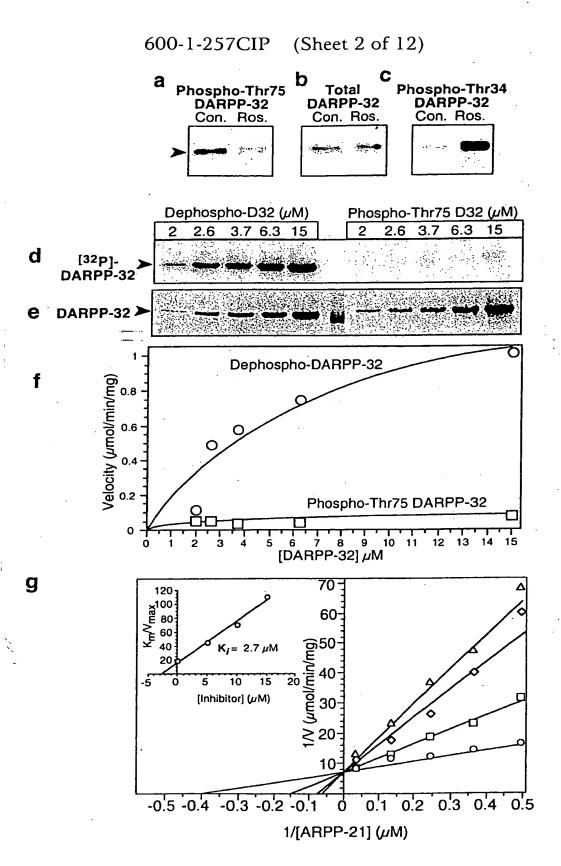


Figure 2

600-1-257CIP (Sheet 3 of 12)

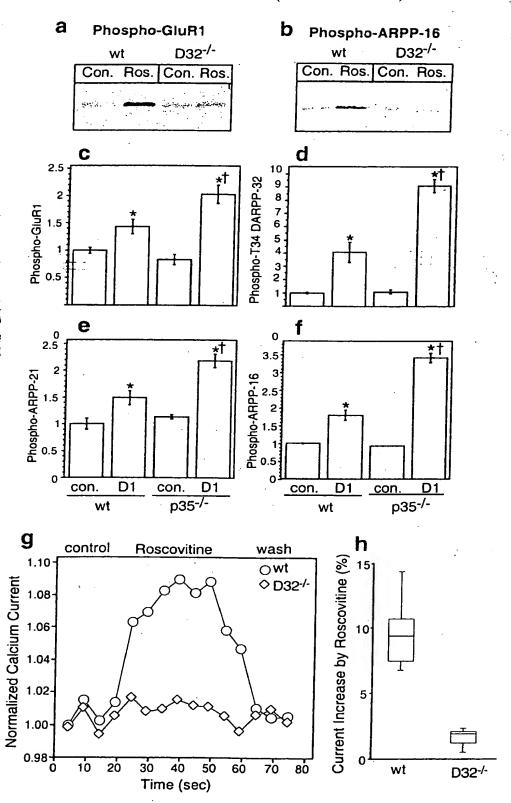


Figure 3

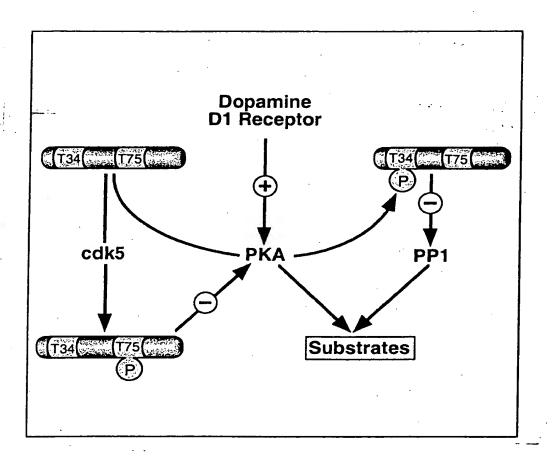


Figure 4A

Potential Therapeutic Targets

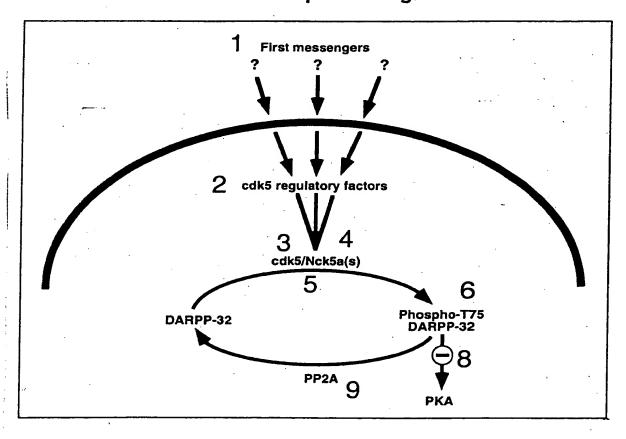
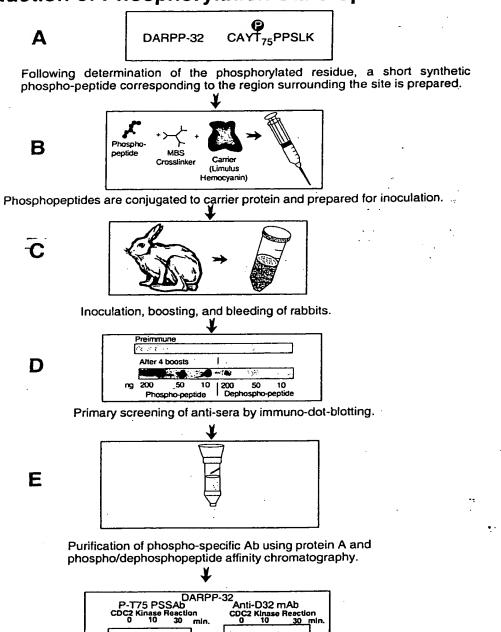


Figure 4B

Figure 5

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Production of Prosphorylation State-Specific Antibody



Confirming specificity by immunoblotting

F

Steps involved in the generation of phosphorylation state-specific antibodies (PSSAb) are illustrated schematically. Typical results of phospho-peptide dot-blot screening of serum are shown. The bottom panel shows immunoblot results confirming the selectivity of the antibody for phosphorylated protein.

Human: Bovine: Rat: Mouse:	34 50 IDPKDRKKIQFSVPAPPSQLDPRQVEMIRRRRPTPAMLPRLSEHSSPEEE IDPKDRKKIQFSVPAPPSQLDPRQVEMIRRRRPTPAMLFRLSEHSSPEEE IDPKDRKKIQFSVPAPPSQLDPRQVEMIRRRPTPALLFRVSEHSSPEEE IDPKDRKKIQFSVPAPPSQLDPRQVEMIRRRRPTPAMLFRVSEHSSPEEE	
Human: Bovine: Rat: Mouse:	75 ASPHQRASGEGHHLKSKRPNPCAYTPPSLKAVQRIAESHLQSISNLNENQ ASPHQRASGEGHHLKSKRSNPCAYTPPSLKAVQRIAESHLQSISNLGENQ SSPHQRTSGEGHHPKSKRPNPCAYTPPSLKAVQRIAESHLQTISNLSENQ ASPHQRTSGEGHHPKSKRPNPCAYTPPSLKAVQHLQTISNLSENQ	
Human: Bovine: Rat: Mouse:	137 19 ASEEEDELGELRELGYPREEDEEEEEDDEEEEEEDSQAEVLKVIRQSAGQK ASEEEDELGELRELGYPREEEEEEEEEEDEEEEEDSQAEVLKGSRGSAGQK ASEEEDELGELRELGYPQEDDEEDEDEDEEEDSQAEVLKGSRGTAGQK ASEEEDELGELRELGYPQEDDEEDEDEEEDEEEDSQAEVLKGSRGTVGQK	50
Human: Bovine: Rat: Mouse:	TRGLGLEGPWQRPPPLDESERDGGSEDQVEDPAL-SEPGEEPQRPSPSE TYGQGLEGPWERPPPLDGPQRDGSSEDQVEDPALN-EPGEEPQRPAHPE TSGQGLEGPWERPPPLDEPQRDGNSEDQGEGRATQSEPGEEP-RH-PT-PP TCGRGLEGPWERPPPLDEPQRDGNSEDQVEGRATLSEPGEEPQ-H-PS-PP	00
Human: Bovine: Rat: Mouse:	P-GR 199 P-GT 198 SGT 201 194	

600-1-257CIP (Sheet 9 of 12)

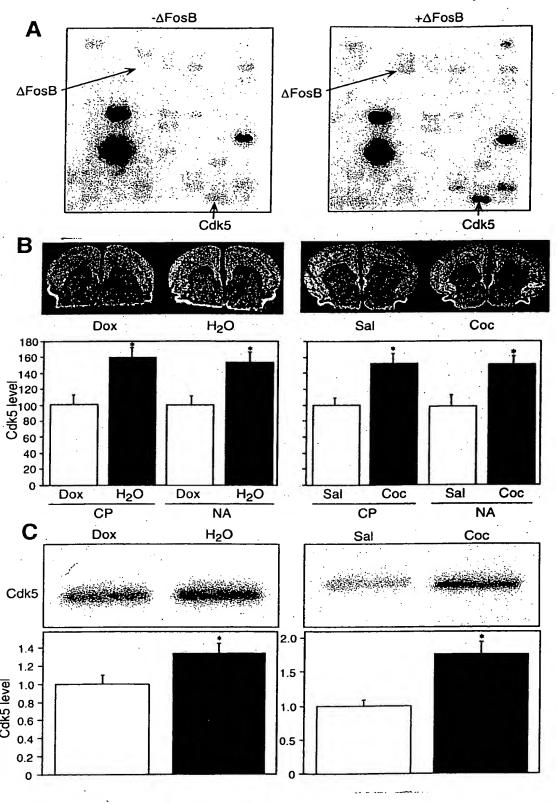


Figure 8

600-1-257CIP (Sheet 10 of 12)

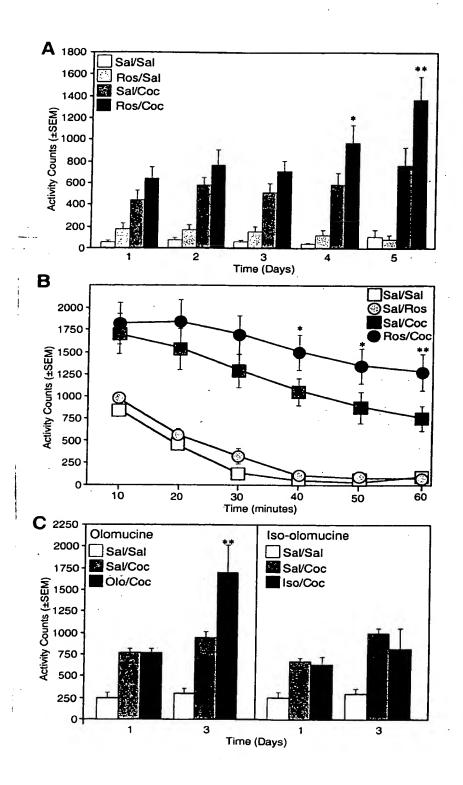


Figure 9

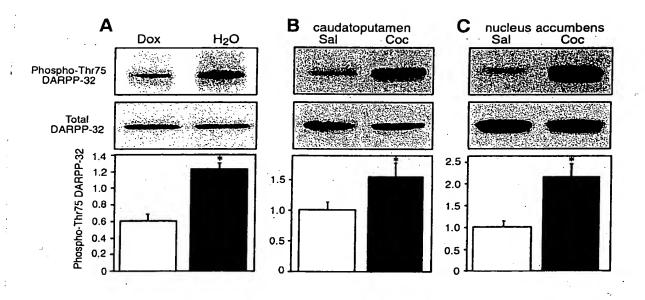


Figure 10

600-1-257CIP (Sheet 12 of 12)

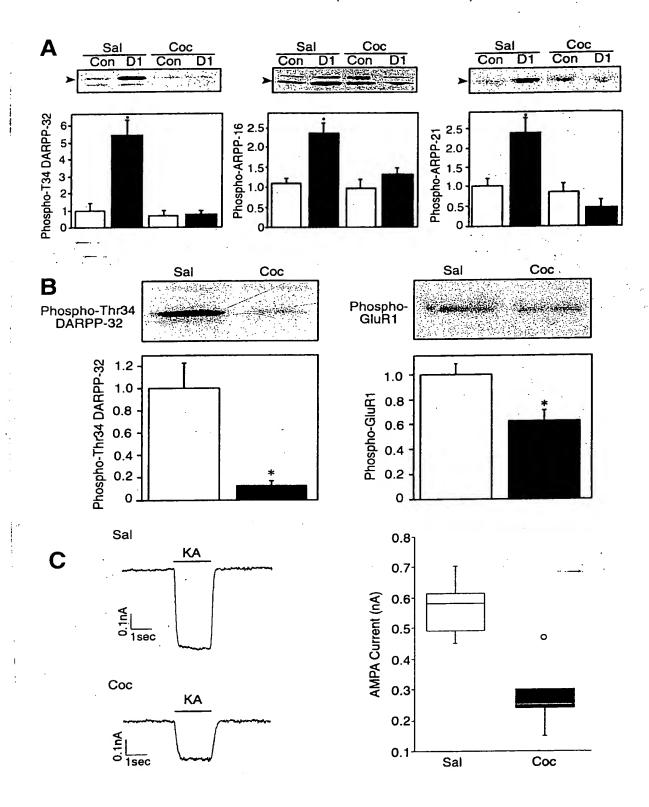


Figure 11